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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/656,173	09/06/2000	Michael D. West	P 0275460 23523-0163	8933

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EXAMINER
WOITACH, JOSEPH T

ART UNIT	PAPER NUMBER
1632	7

DATE MAILED: 12/11/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/656,173	WEST ET AL.	
	Examiner	Art Unit	
	Joseph Woitach	1632	

-- The MAILING DATE of this communication appears on th cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-86* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-86* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

This application filed September 6, 2000, is a continuation in part of 09/527,026, filed March 16, 2000, which is a continuation in part of 09/520,879, filed April 5, 2000, which claims priority to provisional applications: 60/152,340, filed September 7, 1998 and 60/153,233, filed September 13, 1998.

Claims 1-86 are pending and currently under examination.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-39, 80 and 81, drawn to method for rejuvenating a primary cell, a method of genetically modifying said rejuvenated cell, and a non-human embryo generated from said cell, classified in class 800, subclass 8, class 435, subclass 440, class 435, subclass 455, class 435, subclass 325

II. Claims 40-46, 55, 60, drawn to method for identifying a gene that enhances telomerase activity, classified in class 435, subclass 455, class 435, subclass 6.

III. Claims 47-53, 56 and 62, drawn to method for identifying a gene that suppresses telomerase activity, classified in class 435, subclass 455, class 435, subclass 6.

IV. Claims 54 and 57, drawn to a method for identifying a protein which enhances EPC-1 and/or telomerase activity, classified in class 530, subclass 300; class 530, subclass 350.

V. Claims 58, 59, 64 and 67, drawn to a method for identifying a compound which suppresses EPC-1 and/or telomerase activity, classified depending on compound used/identified in for example class 514, subclass 1, class 514, subclass 44, class 530, subclass 300.

VI. Claims 61, drawn to protein which enhances telomerase activity, classified in class 530, subclass 350.

VII. Claims 63, drawn to protein which suppresses telomerase activity, classified in class 530, subclass 350.

VIII. Claims 65 and 66, drawn to gene encoding a protein which enhances, classified in class 536, subclass 23.1, class 514, subclass 44, class 435, subclass 70.1.

IX. Claims 68, drawn to a method for activating endogenous telomerase and/or EPC-1 to extend the life of a cell, classified in class 435, subclass 325.

X. Claims 69-72 and 75-79, drawn to a method of rejuvenating a primary cell by exposing the primary cell to germ or embryonic cell fractions, classified in class 435, subclass 325.

XI. Claims 73 and 74, drawn to DNA derived from a human cell, classified in class 546, subclass 23.1.

XII. Claims 82-86, drawn to a method for identifying compounds that affect cell aging, classified in class 435, subclass 325, class 800, subclass 3.

The inventions are distinct, each from the other because of the following reasons:

Groups I-V, IX, XII are drawn to different and distinct methods. The methods of groups I-V, IX and XII each use different starting products requiring different and unique preparations, recited different method steps, and result in different and unique outcomes/products.

Groups VI-VIII, X, XI are drawn to different and distinct products. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the protein of group IV enhances EPC-1/telomerase activity, the protein of group IV suppresses EPC-1/telomerase activity and each can be used to generate antibodies, the gene of group VIII and the DNA with extended teleomeres of group XI are physically different from a protein and can be used in hybridization assays, further each nucleic acid sequence is unique from each other because they do not share sequence homology nor can they be used interchangeably in hybridization assays, and the cell of group X can be used to study proliferation in culture.

Groups II and VI, and groups III and VII , are related as mutually exclusive species in an intermediate-final product relationship. Specifically, VI and VII are proteins generated from the gene detected in the methods of II and III, respectively. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a polynucleotide probe in hybridization assays and the proteins generated from the gene can be chemically synthesized and are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Groups V and VIII are related as mutually exclusive species in an intermediate-final product relationship. Specifically, VIII is a gene that encodes a protein which may be discovered in the method encompassed by group V. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the method of group V is used to screen more that just genes and encompasses any compound, and the gene of group VIII can be used for hybridization assays or generating proteins, and are

deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Groups IX and X are related as mutually exclusive species in an intermediate-final product relationship. Specifically, group XI is DNA derived from the cell of group X. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the cell of group X can be used for in vitro culture experiments and the DNA of group XI can be derived from a different cell type, and are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Groups I, IX, XII, and IV are drawn to methods which are different distinct methods and a product which is not necessary for use in said methods. The methods of groups I, IX and XII each use different starting products requiring different and unique preparations, recited different method steps, and result in different and unique outcomes/products, none of which encompasses the protein of group IV.

The inventions above are independent and distinct, each from the other. They have acquired a separate status in the art as a separate subject for inventive effect and require independent searches. The search for each of the above invention is not co-extensive particularly with regard to the literature search. Further, a reference which would anticipate the invention of any one Group would not necessarily anticipate or make obvious any of the other groups.

For these reasons restriction for examination is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any

amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Woitach, whose telephone number is (703) 305-3732.

If attempts to reach the examine by telephone are unsuccessful, the examiner's supervisor, Karen M. Hauda, can be reached on (703) 305-6608.

An inquiry of a general nature or relating to the status of the application should be directed to the patent analyst Kay Pinkney whose telephone number is (703) 305-3553.

Papers related to this application may be submitted by facsimile transmission. Papers should be faxed via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center numbers are (703)308-4242 and (703)305-3014.

Deborah Crouch

Joseph T. Woitach

DEBORAH CROUCH
PRIMARY EXAMINER
GROUP 1800/1630